R E P O R T R E S U M E S

ED 016 050 08 VT 001 638

THE ESTABLISHMENT OF THE MISSISSIPPI RESEARCH COORDINATING UNIT FOR VOCATIONAL AND TECHNICAL EDUCATION. FINAL REPORT.

BY- WALL, JAMES E.
MISSISSIPPI RESEARCH COOR. UNIT FOR VOC. TECH.EDUC

REPORT NUMBER BR-5-0099 PUB DATE MAR 67
CONTRACT OEC-5-85-115
EDRS PRICE MF-$0.25 HC-$0.80 18P.

DESCRIPTORS- *RESEARCH COORDINATING UNITS, *PROGRAM DESCRIPTIONS, *STATE PROGRAMS, *EDUCATIONAL RESEARCH, *VOCATIONAL EDUCATION, RESEARCH PROJECTS, RESEARCH PROPOSALS, INFORMATION DISSEMINATION, MISSISSIPPI,

ACTIVITIES OF THE UNIT FOR THE PERIOD JUNE 1, 1965, TO MARCH 31, 1967, ARE REPORTED. TO STIMULATE RESEARCH THE UNIT ASSISTED IN FORMULATING RESEARCH PROPOSALS FOR THE STUDIES--(1) A COMPARATIVE ANALYSIS OF ELECTRONIC CONTENT IN PUBLIC POST-HIGH SCHOOL TECHNICAL INSTITUTES AND ELECTRONIC TECHNOLOGY REQUIREMENTS OF INDUSTRY, (2) FIVE PILOT PROJECTS IN WAGE EARNING IN HOME ECONOMICS IN MISSISSIPPI, 1965-66, (3) DEVELOPMENT AND USE OF SUBJECT MATTER MATERIALS FOR VOCATIONAL EDUCATION IN AGRICULTURE, (4) STATE-WIDE SELF-EVALUATION OF VOCATIONAL-TECHNICAL EDUCATION IN MISSISSIPPI, AND (5) OCCUPATIONAL AND EDUCATIONAL ASPIRATIONS AND EXPECTATIONS OF NEGRO RURAL MALE HIGH SCHOOL SENIORS IN THE MISSISSIPPI DELTA. RESEARCH COORDINATION CONSISTED OF ADVISORY COMMITTEE MEETINGS TO DETERMINE DIRECTION AND POLICY, AND STAFF PARTICIPATION IN STATE DIVISION STAFF MEETINGS. IMPLEMENTED RESEARCH PROJECTS OF UNIT STAFF MEMBERS WERE (1) EMPLOYMENT OPPORTUNITIES AND COMPETENCY NEEDS IN NON-FARM AGRICULTURAL OCCUPATIONS IN MISSISSIPPI, (2) VOCATIONAL EDUCATION IMPLICATIONS OF HIGH SCHOOL DROPOUTS IN A MISSISSIPPI COMMUNITY, (3) DELTA MANPOWER SURVEY, AND (4) AN EVALUATION OF MDTA PROGRAMS IN MISSISSIPPI TO DETERMINE INFORMATION FOR FUTURE PLANNING. DISSEMINATION ACTIVITIES INCLUDED A COMPILATION AND PUBLICATION OF INFORMATION RELATIVE TO THE STATE'S POPULATION AND LABOR FORCE AND REPLIES TO VARIOUS REQUESTS FOR INFORMATION IN SPECIFIC AREAS OF RESEARCH. (EM)

ED016050

FINAL REPORT
Project No. ERD 5-0099
Contract No. OE-5-85-115

THE ESTABLISHMENT OF THE MISSISSIPPI RESEARCH COORDINATING UNIT FOR VOCATIONAL AND TECHNICAL EDUCATION

March, 1967

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

VT001638

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

The Establishment of the Mississippi Research Coordinating Unit for Vocational and Technical Education

Project No. ERD 5-0099
Contract No. OE-5-85-115

Dr. James E. Wall, Director

June 1965--March 1967

The educational research and development activities reported herein were performed pursuant to Contract No. OE-5-85-115 with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Research Coordinating Unit for
Vocational-Technical Education

Social Science Research Center
Mississippi State University

State College, Mississippi 39762

INTRODUCTION

This is the final report of the first funding period (June 1, 1965 to March 31, 1967) of the Mississippi RCU. The second funding period will begin April 1, 1967 and continue through September 30, 1968.

The purpose of this initial grant was to establish a research coordinating unit which would be jointly sponsored by the State Division of Vocational and Technical Education in the Mississippi State Department of Education and the Social Science Research Center of Mississippi State University. Following the approval of the RCU in June of 1965, efforts were begun to establish operating guidelines for the RCU. Detailed directions for the RCU were determined by using the broad objectives for RCU's set forth in the first national meeting of the state RCU Directors held in Washington, D.C. in July, 1965. Further direction was achieved through lengthy discussions with in-state advisory committees, agencies, organizations, individuals, and by attendance to national and regional seminars and conferences. The outcome of these endeavors was the adoption of four general purposes for the RCU:

Purpose No. 1 was to stimulate persons in Mississippi to conduct research in vocational and technical education and in directly related disciplines such as sociology, psychology, economics, other phases of education, and similar areas. The RCU placed itself in a service position to provide technical, consultative assistance and encouragement, upon request in planning, funding, and conducting such research.

Purpose No. 2 was to coordinate vocational and technical education research in Mississippi in order to avoid overlap and duplication, to encourage replication of research where deemed advisable, and to achieve maximum efficiency in research efforts. The RCU provided leadership in identifying and establishing priorities for vocational and technical education research.

Purpose No. 3 was to implement research projects under the direct supervision of the various members of the RCU staff. A number of areas were identified in which an urgent need for research was indicated.

Purpose No. 4 was to disseminate research information that has been derived within the state and that which has been obtained from regional and national sources. The RCU also acted as a clearing house for research reports that were sent to such agencies as the Educational Research Information Center, other RCU's, etc.

METHOD

A. Direction

Various means were utilized to accomplish the purposes as set forth for this particular project. First of all, two advisory committees were established. One of these committees was entitled the Mississippi State University Committee for Vocational-Technical Education Research. Membership on this committee was composed of administrative department heads, deans, directors, coordinators and other officials who represented a cross section of interests located on the Mississippi State University campus. The second committee was entitled Mississippi State Committee for Vocational-Technical Education Research. This was a state-wide committee and membership on it was composed of the state director and the research coordinator of the Division of Vocational and Technical Education of the Mississippi Department of Education. Additional members on this committee were vocational teacher-educators and other persons from the institutions of higher education in the state who have interests in vocational and technical education research. Representation on this committee also contained persons from the Mississippi Employment Security Commission.

The first committee met six times during the project period. The second committee met four times during this period. In each meeting the committee members were brought up to date as to RCU activities. Also during these meetings such items as follows were considered: (1) the national program of development of quality vocational-technical education research; (2) immediate and long term problems in vocational and technical education in Mississippi; (3) priorities for research; (4) identification of researchers, (5) planning, and conducting research; (6) drafting proposals; and (7) financing and supporting projects.

B. Contacts with Other Agencies

Frequent contacts were made with agencies in the state, such as the Division of Research in the State Department of Education; the seventeen junior colleges; all of the high schools and institutions having vocational programs; certain correctional institutions; and various agricultural, business, industrial, and economic agencies and entities. The Mississippi Employment Security Commission has been of great assistance in the conduct of RCU activities. Also, frequent contacts were made with various agencies and departments in the institutions of higher learning in the state.

C. Location

The Mississippi RCU is physically located in the Social Science Research Center (SSRC) of the Mississippi State University.

It is administered as a part of the SSRC program of research in OCCUPATIONAL EDUCATION AND MANPOWER DEVELOPMENT. As a jointly sponsored project between the State Division of Vocational and Technical Education and the SSRC, it enjoys extraordinarily close working relationships not only with the Division, but with other educational departments and agencies as well. It likewise enjoys with other local, state, and federal governmental and nongovernmental agencies a rapport which has been developed by the Division over a period of years.

D. Evaluation

Evaluation of the Mississippi RCU has been and will in the future be a continuous process. Reviews and suggestions have been frequently made by other staff members of the SSRC. The two advisory committees also have served in an evaluative capacity. State, regional, and federal level personnel have frequently aided in evaluating the effectiveness of the RCU, mainly through personal contact.

E. Staff Positions

Director of the Mississippi RCU
Dr. James E. Wall (8/17/65--to present)
Research Coordinator of the St. Div. of Vo-Tech. Ed. (Jackson)
Mr. A.G. Shepherd, Jr. (7/1/64--to present)
Associate Director of the Mississippi RCU
Dr. Arthur R. Jones, Jr. (6/6/66-2/31/67) (Now Admin. Officer of the SSRC and 20% of time on RCU)
Research Assistant with the Mississippi RCU
Mr. John S. Rankin (50% of time 9/1/65--present) (Full-time beginning 7/1/67)
Assistant Director of the Mississippi RCU
Mr. James F. Shill (6/1/67)

The activities of the RCU have been greatly benefited by the services of other SSRC senior level staff members, namely Dr. H.F. Kaufman, SSRC Director; Dr. K.P. Wilkinson, Project Director, Mr. A.W. Baird, Project Director; and the secretarial and clerical members of the staff.

F. Consultants

During the first funding period of the RCU, different persons provided a variety of consultative services, such as theoretical ideas; content of focused studies, both longitudinal as well as short-term research; and inspiration, motivation, and direction for RCU purpose and goal establishment. The following specialists aided greatly in facilitating the work of the RCU:

Dr. C. Arnold Anderson, Univ. of Chicago, Sociologist
Dr. Virgil Christensen, Ohio St. Univ., Vocational Educationist & Researcher
Dr. John Coster, North Carolina St. Univ., Vocational Educationist & Researcher
Dr. June Cozine, Okla. St. Univ., Hone Economics Teacher Educator
Dr. Herbert M. Hamlin, North Carolina St. Univ., Educationist & Researcher
Dr. Duane M. Nielsen, U.S.O.E., Vocational Educationist & Administrator
Dr. Guy E. Timmons, Mich. St. Univ., Vocational Teacher Educator

RESULTS

Much effort was directed toward developing and fulfilling the purposes of the Mississippi RCU. Shown Below are the specific purposes and the various activities which contributed to the attainment of each.

A. RCU Purpose No. 1--To stimulate research.

In this connection the RCU has assisted, or is currently assisting, in the formulation of research-study proposals for the following:

1. A Comparative Analysis of Electronic Content in Public Post-High School Technical Institutes and Electronic Technology Requirements of Industry. This was a study conducted throughout six southern states on the electronic needs of industry and what public post-high school technical institutes are offering in their curriculums. This project was funded by the U.S.O.E. in the amount of $9,500 and was begun on September 1, 1966 and ends June 30, 1967. All work connected with this project has been completed with the exception of drafting the final report. A doctoral dissertation has been completed as a result of the conduct of this project. The findings indicated that electronics instructors placed significantly more emphasis on basic electronic content than what industrial personnel thought was necessary. It was concluded that a customized approach to technical training ranging from 1 to 3 years would reduce the dropout rate, encourage more students to enter the technical field, and better meet the demands of industry whose technical needs range from the relatively simple to the most complex.*

2. Five Pilot Projects in Wage Earning in Home Economics in Mississippi (1965--66). In connection with this project a state-wide conference was held on wage earning in home economics in the fall of 1965, after which five pilot projects were started in various parts of the state for training adult females in clothing services, food services, and similar services. Plans were made to continue the projects beyond the initial period. These pilot projects were reported in a publication recently released by the RCU.*

3. Development and Use of Subject Matter Materials for Vocational Education in Agriculture. This project was conducted among the vocational agriculture teachers in the state of Mississippi. It was begun in November 1966 and will be completed in June 1967. A final report on this project is expected some time in the latter part of the summer of 1967. A doctoral dissertation is in the final stages of completion on this project.*

---

*See REFERENCES AND PUBLICATIONS at the end of this report.

4. State-Wide Self-Evaluation of Vocational-Technical Education in Mississippi. This project was jointly sponsored by the Division of Vocational and Technical Education of the Mississippi State Department of Education and the Research Coordinating Unit. The study was comprehensive in that all vocational-technical programs in the state were included and all the vocational teachers participated. The study involved three phases: first, each vocational teacher in the state rated his or her program; second, a committee composed of the school administrator, the school guidance counselor, and a representative teacher from each type of vocational program in the school also rated the vocational programs in that school; third, a sample of the approximately 450 schools in the state which have vocational education programs was selected and their programs were rated by a validation committee which was appointed by the State Director of Vocational-Technical Education.

Representatives of the schools were called together in meetings held throughout the state in which the objectives and procedures for this study were explained. Verbal and written reports in the form of letters from teachers and administrators indicated that this study was relatively well received, and that it had caused some individuals to do some "soul searching", or contemplation concerning their respective programs. Results of this project should be completed in the form of a final report within three to four months.

5. Occupational and Educational Aspirations and Expectations of Negro Rural Male High School Seniors in the Mississippi Delta. A small grant proposal on this project is nearing completion. It will be forwarded to the regional office in Atlanta for funding. This project will last approximately one year, and will be administered through Alcorn A. & M. College.

6. Another activity undertaken to stimulate vocational-technical education research was a 3-day workshop held in June 1965, to which persons in the state interested in research were invited. This seminar, entitled "Use of the Social Sciences in Applied Fields: Forestry and Vocational Education," also utilized the consultant services of several persons from outside the state. Because of its success in stimulating discussion and facilitating communication, similar seminars will be held at least once each year.

B. RCU Purpose No. 2--To coordinate vocational-technical education research.

1. To achieve this purpose the aforementioned two advisory committees were utilized to help further identify and define problems needing research; to establish priorities for such research problems; to identify potential researchers in the state; and to define the roles and functions of the RCU and how it can act as an aid in bring about innovational changes in vocational and technical education within the

state. During the course of many meetings among these advisory committees the consensus seemed to evolve that some smaller ad hoc committees, charged with a highly specific duty, should be appointed for certain types of research problems.

At one of these meetings information was presented on the contributions which sociology and the behavioral sciences can make in helping to solve vocational-technical education problems. It was recognized that vocational-technical education has become exceedingly complex in contemporary American society. Many factors caused this. Vocational education is complex organizationally; it has an intricately interwoven set of administrative units; its size continues to increase; and coordination of its total range of activities is becoming ever more complex.

Part of the increasing complexity has come about because administrative and operations personnel from the state to the federal level represent many diverse perspectives as to "what ought to be" in vocational-technical education. This complexity is further magnified by the problem of recruiting and retaining qualified, competent personnel in vocational-technical education. This is a particularly difficult problem for Mississippi because of low salaries paid to teachers and administrative and supervisory personnel.

It was brought out during this meeting that sociology can make contributions in various ways. For instance, in instruction, sociology can help in the communication to vocational educators of social science insights into individual behavior, community structure and process, organizational structure and process, and occupational behavior specifically. In research, sociology can help uncover important problems in its analysis of the product of vocational-technical education, which is the student; in studies of the professional vocational educator himself, for instance, the career pattern of such educators. In studies of the structure of vocational education in its community context, sociology can aid in determining the process of program implementation. In evaluation, sociology can make a particularly important contribution by focusing on a comprehensive range of factors which are related to program effectiveness, and by placing these in an appropriate and meaningful perspective, rather than just examination and evaluation of the program at the local school level. An effective program evaluation must include a wide range of factors such as community structure, organizational and administrative problems, the nature and qualifications of students, staff, supervisors, coordinators and their functional roles.

2. RCU staff members participated in all of the annual meetings of the State Division staff during the period. Such meetings are deemed extremely important from the standpoint of information and communication. The State Division staff is continually reminded that the RCU can service it in a research and development capacity. The State Division staff members have frequently requested assistance

from the RCU, especially in the form of information and data that can be used for future planning.

Discussions have been held concerning the establishment of a data reporting service for all of the field data that might be required by the State Division staff in its planning activities. A system for data storage and retrieval is being considered now.

3. To provide continuity for RCU activities a proposal was submitted to the U.S. Office of Education for the continuation of the Mississippi RCU for an additional 18-month period beginning April 1, 1967 and ending September 30, 1968. The proposal was approved and funded in the amount of $95,399. These federal funds will be matched by approximately $20,000 from the Mississippi State Division of Vocational-Technical Education and approximately $36,000 from the Social Science Research Center of Mississippi State University.

C. RCU Purpose No. 3--To implement research projects by RCU staff members.

1. Employment Opportunities and Competency Needs in Non-Farm Agricultural Occupations in Mississippi. Twenty-one of the 82 counties in Mississippi were utilized in this study. All of the nonfarm firms in each of these 21 counties were surveyed. Job titles in each firm were listed and the competency needs and general information about each were recorded. These data have been reported in two published documents. One document contains the general information obtained in the study. The other contains job profiles for each of the job titles discovered in the study and it should be of great use by vocational agriculture teachers.

2. Vocational Education Implications of High School Dropouts in a Mississippi Community. This was a discovery type of study in which basic information was sought concerning school dropout phenomena in one of Mississippi's progressive communities. The general construct for this study was one in which exploration was made of the relationships and interplay of sociological, socio-psychological, and psychological variables which influenced the dropout process. High school dropouts during a three year period from the school were located for depth interviewing. Some 35 known dropouts, both white and nonwhite were interviewed. Additional information concerning the dropouts was gained from school records, school administrators, teachers, and counselors. A situational approach was used to analyze the data. The study has yielded insight in the establishment of hypotheses for further research in similar communities and in dissimilar communities for comparision purposes. This study will yield a report which should be available within two to three months. A master's thesis also is being written from these data.

3. Delta Manpower Survey. This project was a cooperative venture between the Mississippi Employment Security Commission and

the RCU of the Social Science Research Center at MSU. The purpose of the project was to generate data which would justify modification of a formula presently being used by the U.S. Department of Labor to determine the rate of unemployment in the U.S. It is contested that the present formula in use underrepresents unemployment in rural agricultural areas, especially those areas with characteristics similar to the Mississippi River Delta. The objectives of this cooperative project were: (a) to survey values and aspirations of the sample of respondents, (b) to determine the vocational education, experiences and aspirations of the sample and to relate these to the unemployment histories, and (c) to survey the mobility history and plans of the respondents and relate these to their feelings about themselves, about their work, and about living in the survey area. This study was complementary to a study conducted by the Mississippi Employment Security Commission in which 13,000 persons in the Delta counties of Washington, Sunflower, and Bolivar were surveyed. Of this population 3,700 heads of households in Washington county were selected as a "working universe". A "working sample" of nearly 600 heads of households, white and nonwhite, male and female, at all age levels, were selected randomly. Two schedules were used to collect the information, a small area household schedule, and a general questionnaire to probe respondents' values, aspirations, level of living, and vocational education and mobility history and plans. A report of this study has been forwarded to the Mississippi Employment Security Commission. A more detailed report containing all of the data of the study is in the process of being prepared at this time. It should be completed within two to three months. A follow-up of this same "working sample" has been proposed and will focus on (1) determining characteristics of emigrants to Florida, the Midwest, and California; and (2) the impact of the minimum wage law which went into effect on February 1, 1967.

4. An Evaluation of MDTA Programs in Mississippi to Determine Information for Future Planning. This project is in the planning stages. Consultations have been held with State Department officials and regional U.S. Office of Education officials. An experimental and demonstration proposal is being formulated for submission. The major focus of this project will be on the basic education requirements of MDTA trainees. The population will be the displaced farm workers in the Mississippi River Delta, largely Negro. Various types of information will be sought from these people, such as the perceptions which they have as to what the MDTA training program will do for them in the way of leading to an occupation and/or making certain social adjustments. This project is viewed as being exploratory and an analysis will be made of information that is currently available. It also is viewed as a longitudinal type of endeavor and should contribute answers to such questions as: How long does it take to raise a person one grade level in educational attainment?; and How much basic education in arithmetic and in communication does a person need to enter and successfully complete specific MDTA training programs?

D. RCU Purpose No. 4--To disseminate research information.

Information concerning vocational and technical education comes from a multitude of sources and disciplines. Frequently the information must be interpreted for and related to local situations in the state. This purpose was met by establishing communications with numerous agencies and officials, by developing feedback channels, and by widely circulating reports and other written information.

1. One activity directed toward achieving this purpose resulted in the compilation and publication of pertinent information concerning Mississippi's population and labor force composition and mobility. Also included in the publication were summarizations of the various vocational and technical education programs in the state. This material was compiled, published, and distributed to local school administrators, vocational educators, counselors, teachers, state supervisors, and other officials interested in vocational education in the state of Mississippi. Much additional and more up-to-date material has been accumulated and major revision of this publication should be started soon.

2. The RCU frequently receives requests for information in specific areas of research. These requests are filled in a variety of ways: (a) by personal contact, (b) by direct correspondence, (c) by distribution of publications and circulars, and (d) by oral presentations concerning the work of the RCU. These oral presentations have been given to various organizations, agencies, and groups, and it is emphasized that RCU personnel are available upon request to give similar presentations in the future.

DISCUSSION

The activities of the RCU staff were directed primarily toward determining research priorities and conducting research. Secondarily, they have served in a consultative capacity to individuals and agencies who sought help in research and development activities.

The RCU was somewhat hampered throughout the period for lack of staff to conduct its activities. The search for persons within the state who possessed both the time and capability for conducting research in occupational education has not been as fruitful as was desirable. The potential researchers in the vocational teacher-education departments have full-time teaching loads. Administrative and supervisory staff members also are overburdened with expansion activities. Though small, some progress was made in trying to get "released time" for some of these persons to do research. Likewise, some progress was made in imparting a research appreciation to vocational educators and administrators in the state; however, there remains much to be done in this area, especially among local school personnel.

An analysis of the results of activities during the grant period indicates that the RCU did achieve marked success in terms of its stated purposes.

CONCLUSIONS

The Mississippi RCU employed a variety of techniques in the conduct of its activities. These included: (1) communication by holding and attending meetings, seminars and workshops, (2) the conduct of pilot projects, (3) research for curriculum revision, (4) program evaluation, (5) consultative work to other researchers and research agencies, and (6) dissemination of research information. The RCU staff provided needed leadership to implement these activities.

The following is presented as the result of a subjective re-evaluation of the Mississippi RCU and its location in the MSU Social Science Research Center. As stated before, the RCU is a major project in the SSRC program of research in OCCUPATIONAL EDUCATION AND MANPOWER DEVELOPMENT. The structure of this program is composed of three major aspects, namely: (1) Research, (2) Interpretive Communication, and (3) Graduate Training.

A. Research--The conduct and coordination of research is a major and complex part of the program. RCU staff members have led the way in initiating and stimulating research within the state. The RCU conducted research because of the dearth of occupational research information available in the state, and, to a certain extent, to set an example for other prospective researchers

B. Interpretive Communication--Interaction between persons facilitates the exchange of ideas. Researchers must interact with practicioners in order to communicate research results and to get "feedback" upon which "problem oriented" research studies can be based. Put somewhat differently, research results must be translated by researchers and interpreted by practicioners in terms of action sequences which ultimately will lead to progress in educational program development. To facilitate such interpretive communication for this program, the following techniques were used: (1) workshops, seminars, conferences, short-courses held as the needs arise; (2) use of off-campus consultants and lecturers; and (3) extensive use of advisory committees of various types.

These types of communication activities require specially trained personnel, persons with knowledge about kinds of mechanisms designed to bring about planned educational change. Such mechanisms thus far, are not very clear as to form, but the consensus is that t they must include as essential components: (1) staff involvement in inventing and/or selecting innovations, (2) evaluation of present programs and of proposed innovations, and (3) provision for continual innovation. The need for persons who can operate in such a context is self-evident. The demand for their services will be continuous over a long foreseeable future, and the acute shortage of such persons in Mississippi presents us with our most pressing problem.

C. Graduate Training--Good education does not occur through the use of tricks and tools, but through well-prepared teachers and other education personnel. It is estimated that such innovations as computerized classrooms are almost here; but the most pressing current problem is that teachers and schools just are not changing fast enough, and technology is changing too fast. To get teachers and schools to change will require experts in educational change, which might also be termed the innovation process. It is axiomatic that no worthwhile program that is designed to bring about change and/or innovation in education can be developed in isolation. A program's developmental matrix is composed of numerous determinants, each of which varies in intensity and in direction at different points of time. To study one aspect of education to the complete exclusion of others merely contributes to an already growing trend toward "compartmentalization," "fragmentation," etc. Likewise, to study education to the exclusion of other social, economic, and political realities simply contributes to a closed body of "isolated ignorance." To offset such trends, the program of Behavioral Studies in Occupational Education and Manpower Development will approach the problems involved in innovation in education with special reference to an interdisciplinary base. This will require that cooperative relationships be maintained with many different agencies in and outside the state.

The growth of occupational education in Mississippi has been nothing less than phenomenal during the past few years. Increasingly, more people are being benefited, greater support is being received, attitudes toward the various programs are becoming more favorable, physical facilities are being expanded, and program offerings are becoming more diversified. In November of 1966, the Division of Vocational-Technical Education of the Mississippi State Department of Education released figures which substantiate this growth. These figures indicated that there were almost 105 thousand students and adults who were trained in 1107 different training programs during the 1965-66 school year. Federal funds allocated to Mississippi for these programs rose 400% in 2 years, while state appropriations increased from $2.5 million in 1963-64 to $8.3 million in 1965-66. Manpower Development and Training Act programs consumed $11 million in 1965-66. More than $10 million have been spent over the past 2 years for building construction and equipment.

Coupled with these far-reaching expansions have come corresponding increases in demands for more people to staff the programs in the state. Some 1450 persons--teachers, coordinators, administrators, supervisors, teacher educators, curriculum specialists, etc.--are currently employed in occupational education programs in Mississippi. Not only new people are needed to add to these staffs, but those persons already employed in these programs are becoming increasingly more active in pursuing professional improvement, either in the form of advanced academic degrees or participation in inservice seminars, workshops, institutes, short-courses and the like. The pressures of adaption to change have caused persons to become more aware of the need to improve themselves professionally. Presently established teacher

education departments in the various institutions of higher learning in the state are attempting in every way possible to meet these needs. Meanwhile, persons seeking advanced graduate (doctoral) degrees, in occupational education must go to institutions outside the state to obtain them, usually at great expenditures of time and money to themselves and loss of time and continuity to the programs which they man in the state.

The foregoing material affords ample evidence of the need for persons with advanced professional training to work in occupational education in Mississippi. In order to properly prepare the types of personnel needed for future occupational education programs, consideration is being given to a graduate training program leading to the M.S. and Ph.D. in occupational education.

SUMMARY

The Mississippi Research Coordinating Unit for Vocational-Technical Education was approved and funded in June, 1965, under the provisions of the Vocational Education Act of 1963, P.L. 88-210, Section 4(c). The initial period was for 18 months with a 4-month extension. The RCU will be continued for an additional 18 months through September 30, 1968.

The RCU is jointly sponsored by the State Division of Vocational and Technical Education of the Mississippi State Department of Education and the Social Science Research Center of Mississippi State University. It is located in the Social Science Research Center on the Mississippi State University campus and has one staff member in the State Division.

The RCU has rendered services to all aspects of vocational education in the state, to the Mississippi Employment Security Commission, to the Mississippi Economic Council, to local school districts, to junior and senior colleges and universities, to vocational teacher education departments, and to the two vocational curriculum laboratories.

The RCU has established its purposes and priorities through consultations with educational, business, industrial, and community leaders, as well as with the two committees which advise it. It will continue its development by using the same techniques, persons and agencies.

REFERENCES AND PUBLICATIONS

Hamlin, Herbert M., "Use of Behavioral Sciences in Research on Problems of Occupational Education," (Paper presented at a workshop: Relating Behavioral Science Research to the Applied Fields of Forestry and Vocational Education, sponsored by the SSRC of Miss. St. Univ., June, 1966).

Jacks, Lloyd P., "Development and Use of Subject Matter Materials for Vocational Education in Agriculture," (tentative title of a doctoral dissertation at the Louisiana State University, Baton Rouge, 1967).

Vasek, Richard J., "A Comparative Analysis of Electronic Content in Post-High School Technical Institutes and Electronic Technology Requirements of Industry," (doctoral dissertation, Library, Texas A.&M. University, College Station, 1967).

Wall, James E., Influential Factors Concerning Human Resources in Mississippi, (Preliminary Report No. 11, Education Series No. 1, Social Science Research Center, Mississippi State University, February, 1966).

Wall, James E., Obed L. Snowden, and A. G. Shepherd, Jr., Employment Opportunities and Competency Needs in Nonfarm Agricultural Occupations in Mississippi, (Preliminary Report No. 16, Education Series No. 3, Social Science Research Center, Mississippi State University, March, 1967).

Wall, James E., "Writing, Dissemination, and Use of Research Findings as Parts of the Educational Change Process," (Paper presented at a workshop: Relating Behavioral Science Research to the Applied Fields of Forestry and Vocational Education, sponsored by the SSRC of Miss. St. Univ., June, 1966).

Witt, Mildred R. and James E. Wall, Research in Home Economics Gainful Employment: Five Pilot Projects in Mississippi--1965-1966, (Preliminary Report No. 15, Education Series No. 2, Social Science Research Center, Mississippi State University, December, 1966).